

a memory for storing master characteristic information associated with each genuine bill which the system is capable of identifying; and

signal processing means for comparing said retrieved characteristic information with master characteristic information associated with at least one genuine bill; said signal processing means generating an indication of the [identity] denomination of said bill based on said comparison when said retrieved characteristic information sufficiently matches said master characteristic information.

8. (Amended) The currency evaluation device of claim 1 wherein said signal processing means further includes means for comparing laterally displaced scanned patterns with laterally displaced master patterns associated with corresponding laterally displaced scans of at least one genuine bill, said signal processing means generating an indication of the [identity] denomination of said bill based on said comparison when said scanned patterns sufficiently match said master patterns.

13. (Twice Amended) A compact currency evaluation device for identifying the denomination of currency bills of different denominations comprising:

a housing having a depth dimension, a width dimension and a height dimension within which said device is enclosed;

said depth dimension being about 5 times the smaller cross-sectional dimension of the smallest dimensioned bill to be identified by said device;

said width dimension being about 2 times the larger cross-sectional dimension of the smallest dimensioned bill to be identified by said device;

a discriminating unit for retrieving characteristic information from one or more bills;

a memory for storing master characteristic information associated with each genuine bill which the system is capable of [identifying] denominating; and

signal processing means for comparing said retrieved characteristic information with master characteristic information associated with at least one genuine bill; said signal processing means generating an indication of the [identity] denomination of said bill based on said comparison when said retrieved characteristic information sufficiently matches said master characteristic information.

14. (Twice Amended) A compact currency evaluation device for identifying the denomination of currency bills of different denominations comprising:

a housing having a depth dimension, a width dimension and a height dimension within which said device is enclosed;

said height dimension being about 10 inches;

a discriminating unit for retrieving characteristic information from one or more bills;

a memory for storing master characteristic information associated with each genuine bill which the system is capable of identifying; and

signal processing means for comparing said retrieved characteristic information with master characteristic information associated with at least one genuine bill, said signal processing means generating an indication of the [identity] denomination of said bill based on said comparison when said retrieved characteristic information sufficiently matches said master characteristic information.

18. (Twice Amended) A compact currency evaluation device for identifying the denomination of currency bills of different denominations comprising:

a housing;

an input bin mounted to said housing;

an output bin mounted to said housing;

a transport path for transporting bills through said housing from said input bin to said output bin;

a first roller having one portion extending into said input bin and another portion extending into said transport path;

a second roller located along said transport path and spaced apart from said first roller along said transport path by a distance less than the narrow dimension of a bill; [and]

at least one stacker wheel having one portion extending into said transport path and another portion extending into said output bin, said stacker wheel being located along said transport path and spaced apart from said second roller along said transport path by a distance less than the narrow dimension of a bill;

a discriminating unit for retrieving characteristic information from one or more bills;

a memory for storing master characteristic information associated with each genuine bill which the system is capable of identifying; and

signal processing means for comparing said retrieved characteristic information with master characteristic information associated with at least one genuine bill, said signal processing means generating an indication of the denomination of said bill based on said comparison when said retrieved characteristic information sufficiently matches said master characteristic information.

22. (Amended) The currency evaluation device of claim 21 wherein said signal processing means further includes means for comparing laterally displaced scanned patterns with laterally displaced master patterns associated with corresponding laterally displaced scans of at least one genuine bill, said signal processing means generating an indication of the [identity] denomination of said bill based on said comparison when said scanned patterns sufficiently match said master patterns.

23. (Amended) The currency evaluation device of claim 21 wherein said discriminating unit initiates scanning a segment of said bill at a predetermined distance inboard of the leading edge of said bill, said scanned pattern being associated with the scanning of said segment; and

wherein said memory stores a [third] first master pattern associated with the scanning of a segment of a genuine bill having a given denomination beginning at said predetermined distance inboard of the leading edge of the given denomination genuine bill and a [fourth] second master pattern associated with the scanning of a segment of a genuine bill having the given denomination beginning before said predetermined distance inboard of the leading edge of the given denomination genuine bill.

24. (Amended) The currency evaluation device of claim 18 further comprising:
a transport mechanism for transporting bills, one at a time, along [a] said transport path past said discriminating unit, said transport path being at least as wide as the widest type of bill that the system is designed to discriminate;

said discriminating unit retrieving characteristic information from a bill using a scanhead located near the center of said transport path;

said memory storing master characteristic information associated with laterally displaced scans for at least one genuine bill, said master characteristic information associated

with laterally displaced scans assisting in compensating for lateral displacement of said bill relative to the center of said transport path.

25. (Amended) The currency evaluation device of claim 24 wherein said transport mechanism transports said bills at a rate in excess of about 1,000 bills per minute.

27. (Twice Amended) A compact currency evaluation device for identifying the denomination of currency bills of different denominations comprising:

- a housing having a depth dimension, a width dimension and a height dimension;
- a footprint of said device defined by the area obtained by multiplying said depth dimension by said width dimension being about 125 square inches;

- a discriminating unit in said housing for retrieving characteristic information from one or more bills;

- a memory in said housing for storing master characteristic information associated with each genuine bill which the system is capable of identifying ; and

- signal processing means in said housing for comparing said retrieved characteristic information associated with at least one genuine bill, said signal processing means generating an indication of the [identity] denomination of said comparison when said retrieved characteristic information sufficiently matches said master characteristic information.

30. (Twice Amended) A compact currency evaluation device for identifying the denomination of currency bills of different denominations comprising:

- a housing having a depth dimension, a width dimension and a height dimension;
- the volume of said housing, defined by the product of said depth dimension and said height dimension and said width dimension being about 1,250 cubic inches;

- a discriminating unit in said housing for retrieving characteristic information from one or more bills;

- a memory for storing in said housing master characteristic information associated with each genuine bill which the system is capable of identifying ; and

- signal processing means in said housing for comparing said retrieved characteristic information with master characteristic information associated with at least one genuine bill, said processing means generating an indication of the [identity] denomination of said bill